I lay, you lay, we all want to Inlay

You know how often one thing leads to another, well I’ve spent some time over that past few months working with slabs, some more successfully than others. One of the issues with slabs of course is that you eventually have to deal with cracks, some major, some minor, some catastrophic. Bottom line, I started thinking about inlay types and purposes. Turns out, there are numerous variations within the inlay domain.

**Purpose:** I believe there are several over-riding purposes for considering an inlay. The first is artistic design. You want to have some point of interest in the middle of a table top, or banding around the sides. The top end of this category would be marquetry. A second reason to consider an inlay is preventative – you want to stop a crack from propagating. A butterfly insert is the most common example. A third motivation is to “hide” a flaw on the wood such as a knot, rot, or check, etc. So, you cut it out and fill in with one of the many options available. A variation on this theme is to NOT hide the flaw but to accentuate it – as in my own case where I wanted to use a walnut slab for a small bedroom bench and decided to fill a very long crack with epoxy dyed dark brown (see photo). Hiding the crack was not possible!

**Material Options:** Here the story gets more interesting. Categories include:

Wood: I’ve seen examples where a wooden inlay removes an ugly knot or some other defect in a table top layup – the inlay can be round, rectangular, or anything else. Perhaps the most common example is the butterfly inlay to stabilize a crack. Another factor: the inlay can be a contrasting wood such as maple in walnut, or the same wood itself such as walnut in walnut with a contrasting grain orientation. Wood is also the material of choice for banding and string inlays. Generally the project begins with a router or router pane, Dremel or razor knife in hand but many specialized tools are also available for cutting straight and curved patterns in wood. And of course you can upgrade to a CNC approach for patterns of any complexity.
Veneer: Marquetry, what more can I say.

Epoxy: I once used clear epoxy to fill a small defect in some random woodworking project, but more recently tried my luck with a large crack in a slab bench (photo) and a System Three product. I trust that the bench top will be stable, but only time will tell. There are countless articles online about using epoxies in woodworking. Variations include dyes, fillers such as stones, sea shells, powdered metal, mother of pearl, etc. to produce various artistic effects. Two-part epoxies themselves come in a variety of formulations typically 1:1 or 2:1 ratios of resin to hardener, as well as a wide variety of temperature capabilities and price points. I would guess that West Systems is at the high end of the cost spectrum. With dyes, you can add almost any color to an epoxy mix. Online sites show lots of epoxy designs in cutting boards, although this seems rather risky to me – risky to the epoxy, and risky to the food perhaps.
Fiber glass resin: Similar to epoxy in terms of its woodworking applications, but I think this material takes paint well.

Hot glue: I haven’t tried this either, but I’ve seen a demo where a hot glue gun loaded with glue sticks of different colors was used to add a special effect to a wood surface. Generally, a pattern is cut into the surface and then filled with glue melt. I have no idea how resistant this would be to wear and tear, but I would not hold my hopes up.

Molten metal: If you are after a special effect, this could be it. Some alloys of tin will melt below $300^\circ$ F and can be poured into a design without burning the wood host. The demo I’ve seen wasn’t very encouraging since a lot of sanding was required in the end and there were still some voids around the inlay.

When it comes to adding visual interest to your woodworking project, are you an outlier or an in-layer?